#### REMARKS

These remarks are responsive to the Office Action mailed March 11, 2005. Claims 1-3 and 5-20 were pending at the time of the last examination. Claims 1-3 and 5-20 remain pending. Reconsideration of the application is respectfully requested in view of the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

#### I. Allowable Subject Matter

The Examiner's allowance of claims 9-20 is appreciated. Applicants wish to thank the Examiner for the careful review and allowance of these claims.

The Examiner objects to claims 5-8 but states that these claims would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

In response, Applicants note that claim 5, which was formerly dependent upon independent claim 1, was rewritten in independent form in Applicants' Amendment "A" filed on December 6, 2004. Applicants believe that the present objection to claim 5 is based on an

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erroneous assumption in the Office Action that claim 5 remained dependent upon claim 1. Applicants therefore assume that claims 5-8 should be considered as allowable by the Examiner when examined independent of claim 1. As such, Applicants submit that independent claim 5, together with dependent claims 6-8, is allowable as written. Removal of the objection to these claims and allowance thereof is therefore respectfully solicited.

# II. PRIOR ART REJECTIONS

# A. Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over Yokouichi et al. (U.S. Patent No. 5,973,339) in view of Davids et al. (U.S. Patent Publication No. 2003/0161571) and further in view of Dijaili et al. (U.S. Patent No. 6,577,654).

Applicants traverse the Examiner's rejection for obviousness on the grounds that the cited references — either individually or in combination — fail to teach or suggest each and every element of the rejected claims. In particular, independent claim 1 requires, in an optical signal detector, the presence of a detecting layer formed on a substrate, "wherein the detecting layer is one of a PIN diode and an APD diode...." As expressly admitted in paragraph 4 of the Office Action, Yokouichi fails to teach such a device. Davids also fails to teach a detector having such a detecting layer.

Further, Dijaili, which is alleged in the Office Action to teach the above detecting layer, also fails to teach or suggest this element. Indeed, Dijaili appears only to mention a monitor that receives optical signals as part of a larger signal power monitor and regulator system, such as that denoted at 1200 and 1300 in Figures 12 and 13, respectively. In those figures, a monitor

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1204 is indicated, but only in block form and as a presumably discrete device that forms a part of the larger system shown in the Figures. No mention is made of such a monitor including a detecting layer formed by one of a PfN diode or an APD diode, as expressly required in claim 1. Indeed, the only mention of PfN diodes and avalanche photodiodes is made in a single claim, claim 9, of *Dijaili*. This falls far short of what is required to teach or suggest a detecting layer in an optical signal detector that is one of a PfN diode and an APD diode, as claim 1 requires.

Thus, even a combination of *Dijaili* with *Yokoulchi* and *Davids* fails to teach each and every element of the present claimed invention as set forth in claim 1. As such, Applicants submit that the Examiner has failed to set forth a *prima facie* case for obviousness and respectfully request that the rejection under Section 103 to claim 1 be withdrawn. Further, inasmuch as claims 2-3 depend on claim 1, they are also allowable for at least the reasons given above. Applicants therefore respectfully solicit the removal of the rejection to these claims under Section 103.

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### CONCLUSION

In view of the foregoing, Applicants believe that claims 1-3 and 5-20 are in condition for allowance. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this Haday of August, 2005.

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